

Effective Instruction Teaching in the EDNET Classroom Chapter 6

It is a paradox that technology can overcome physical distance but at the same time can generate psychological distance. Your challenge is to facilitate interaction between you and your students, encourage active participation, promote effective communication, and motivate them toward academic achievement. Effective instruction is effective instruction regardless of the delivery system. However, when a teacher has been teaching in the traditional classroom setting, a mind-set change is required to make the class equally effective in the EDNET setting. In this section we will identify some effective strategies that can enhance the teaching performance and improve the learning opportunities.

6.1. Application of effective instruction in distance learning settings: The following strategies have been identified as creating a positive learning environment in distance learning classrooms (Willis, 1994).

6.1.1. Calling students by their name: Referring to the students by name helps them feel that they are part of a unique classroom. The teacher can have a seating chart from each site for quick reference regardless of the student's location.

Addressing a student at a distant site by name helps promote discussion and a sense of "class." Questions can be addressed to specific students to assess their understanding of a concept.

6.1.2. Providing clear statements of purpose: The objectives of the class need to be clearly stated in the class outline and presented at each session. This encourages students to monitor their own progress. As they hear what it is they are intended to learn, they have some criteria for identifying if they are learning what they should be.

6.1.3. Using print material: Even though the EDNET classroom has access to multiple types of technology, there is still a real need for print material. Some information is better suited to print and students should still be required to do the necessary reading. Print material presented using ELMO or other means can support discussion topics and concepts in a lesson. Providing a print copy of the class content provides some security for students who are in an unfamiliar environment. The print materials can be used as a reference source for students to use later. A complete extended syllabus (see Chapter 4) informs students of dates, assignments, and objectives that they would obtain by speaking to the teacher if they were in a face-to-face situation. At the receiving site they can check the print material to answer many of their questions.

6.1.4. Using discussion: A straight lecture format is not the most effective teaching style using the EDNET system. Students require more involvement when they are at a receiving site. They need the opportunity to share their ideas and ask questions to clarify their own understanding. With just a few students located at a receiving site, they may feel they are not a part of the class and their attention and behavior may reflect their lack of involvement in the learning process. Involving all of students in discussions makes them become a part of the classroom.

6.1.5. Using your voice: When you are not in the physical presence of each member of the class, your voice becomes even more important than in a regular classroom because the students rely more on what you are saying. By using the voice to provide clues as to what is happening or about to happen, the students have an additional source of information to aid them in learning. Teachers generally have a direction-giving voice, a classroom management voice, etc. By capitalizing on your special voice for the appropriate occasion, you are providing additional sources of information to your students. Your voice can alert students to important information that they need to remember.

Also, by having a flexible voice you are helping students reduce the monotony of listening to you for extended periods of time to your single mode of delivery.

6.1.6. Encouraging involvement: We have talked about discussion as an important tool for increasing student learning, but involvement in the content of the lesson is critical for students. They do not learn by sitting and listening to others. They need to be sharing their own learning, and be involved in activities, and/or working with others. Cooperative learning groups can provide the students with the opportunity to work with others at all sites to better understand the content. Distance learning affords students in geographically isolated areas opportunities to come together as never before to work cooperatively in the school setting. **Some of the most exciting times for a distance**

learning teacher will come when they see this happen. Training in the procedures of group work will enhance the success of cooperative learning groups. Involvement of your students becomes more important when the teacher is removed from the student. When students are not in the direct presence of the teacher, good classroom management practices are essential for success. The same strategies that make for a dynamic teacher in a traditional class will be accentuated in the distance learning classroom. The opposite is also true!

6.1.7. Offering individual feedback as quickly as possible: Since students will not have the opportunity of before- and after- class meetings with you, they need some way of knowing how well they are performing. Feedback, oral or written, is critical to help students monitor their learning. The feedback needs to be more than a simple score or grade. Students need a comment as to how they are doing such as could be given in a face-to-face encounter. A simple note on a written assignment tells the student you do know who he/she is and you know how they are doing. It takes a little more time, but it is well worth the effort. With the use of FAX machines, written assignments can be returned quickly to each site. Providing regular, consistent grade reports also provides feedback that helps students monitor their learning.

6.1.8. Promoting interpersonal relationships with distant learners: By applying the previously discussed strategies, you will be well on your way to establishing positive interpersonal relationships. This becomes even more important when teaching in an EDNET classroom because you are removed from the receiving sites. Students need to know their teacher and know that their teacher knows them.

They also need to know what is expected of them regarding behavior and learning.

These are the types of relationships that need to be monitored by you. Students are placed in a new type of learning environment and they need support in this environment. Below are some suggestions for promoting positive interpersonal relationships.

- Make sure communications are clear.
- Visit each receiving site (arrange for a substitute).
- Arrange for group activities when possible.
- Be sure that substitute teachers who may fill in for you for a day are familiar with how you teach on the distance learning network. If substitute teachers are not feasible, consider pre-taping your "missed" class ahead of time and have the site facilitators record the tape at a convenient time and then replay it during the "class."

Example: A high school teacher regularly travels to the various sites and originates the class from their location.

Example: A rural college calculus teacher maintains the illusion of eye contact with remote sites by dividing attention between his live students in his classroom and the teacher camera set on top of the TV monitor at the back of the room. This makes it appear to the remote students that the teacher is looking at them--which he is!

6.1.9. Eye contact in the classroom: The remote students are obviously aware of the distance between them and their teacher. Encouraging interaction begins with good eye contact. One of the important ways to help students feel they are actively participating in a class rather than passively "watching a TV show," is maintaining the illusion of teacher/student eye contact.

We use the word "illusion" because there is no real eye contact when a teacher is looking into the lens of the television camera, but from the perspective of the students at receive sites, there is nevertheless the distinct impression of direct eye contact.

This illusion is maintained by placing the teacher's television camera in close physical proximity to the TV monitor

displaying incoming video from remote sites. This allows the teacher to look at a television image from other sites while appearing to be looking directly at the camera.

A good distance-learning teacher knows how to divide attention and eye contact between the students in the live classroom and the TV camera. This helps the distance-learning students feel they are part of a live class.

6.1.10. Ability to listen: You will find that just as students rely on your voice, you are going to rely very heavily on what students say to you. Your listening skills will be put to the test every time you teach.

You need to listen not only for understanding of content, but for frustration, confusion, and anxiety. You may not always see body language to clue you into student difficulties, and their voice will become your primary source for information regarding their attitudes toward the learning in the class. Also, you will need to send a message, through your ability to listen, that you do listen and attend to what students are saying.

6.1.11. Ability to elicit feedback from students: The single most critical factor in determining success of the distance learning class will be your ability to "see" and "hear" what your students are learning and *react* to it.

Students generally will not be inclined to ask questions of the teacher if they do not understand. Add to that the separation of the students and teacher and it becomes vital for the teacher to be able to reach out through the technology and engage the students in what they are supposed to be learning.

The EDNET system is designed for interactivity; it must be used that way. The distance learning teacher has a wide array of high technology devices at her/his hand to assist in live, interactive, engaging teaching. But if your teaching is allowed to fall into the category of the "Talking Head" as was common years ago, then our students will turn the distance learning teacher off just as they do in any other non-successful situation.

The teacher's ability to listen and engage the student and determine his/her level of understanding using visual clues and limited sound clues requires the teacher to be especially observant. Teachers should practice active listening techniques:

"John in St. George, you look puzzled. Can I help you understand that problem?"

"Amanda at Roosevelt, you said that Newton's first law of inertia relates to people as well. What do you mean by that?"

"Mary at Weber High, will you explain what is significant about DNA replication in meiosis?"

"Sandy at South Summit, would you explain to the kids at Manila what your group came up with?"

"Mark at Dugway, your answer was good, but could you explain it a little more please?"

6.1.12. Evidence of self-confidence: You will be viewed on the monitor; and for some this can be an uncomfortable experience, but it does pass. It is important at all times that you appear self-confident. Students will be very prone to question your abilities if you appear to lack confidence in yourself. A relaxed posture, a smile on your face, and a sense of presence will send the message to your students that you are comfortable in the EDNET classroom and are confident that students will be comfortable and able to learn. This message is critical: *you need to allow your unique personality to come through in the classroom and through the lens.*

6.1.13. Ability to effectively use the technology: There will be training for you before you begin teaching in the EDNET classroom, but you will also have to spend some extra time becoming acquainted with the various technologies available to learn how to integrate them into your teaching. Much of this will come with experience, but make sure you know enough about the system to make classes flow smoothly. If you have a site technician he/she can provide assistance. If you don't, make sure you have a method for getting in touch with individuals who can provide assistance.

Don't make the mistake of limiting your use of the technologies simply because you haven't learned how to use them. You will be short-changing yourself and your students if you limit the use of the technologies in the EDNET classroom.

Besides, they're not that hard to learn.

6.1.14. A flair for the dramatic: You already know that a good teacher is part actor. This applies even more when teaching in the EDNET classroom. A bit of exaggeration in voice and gestures helps create a relaxed and interesting environment. Show your interest, concern, and enthusiasm in ways that tell the students you enjoy what you are doing and want them to learn and enjoy the learning process.

6.1.15. Spontaneous creativity: Even though you will *storyboard* your lessons and plan the various learning experiences in detail, you need to have time for spontaneity. Take time to laugh together, to enjoy a brief sidetrack that presents itself or to alter your direction when something indicates that there is a better approach. In the classroom there is no way to plan for all the variables that are encountered. Be flexible and intuitive enough to see when a better approach presents itself and pursue it.

You are the professional, and your instincts are to be trusted. If a spontaneous approach works particularly well, make a written note of it for possible inclusion in a future lesson. Don't rely on your memory.

6.1.16. Support for students at the local site through access to support materials and an effective site facilitator: Well-trained site facilitators become your eyes and ears at the receiving sites. Their primary role is to help the students at the receiving sites, but they can provide you with invaluable feedback regarding activities at the site. Site facilitators perform some of the monitoring of learning experiences, material distribution, assignment collection, etc.

Take the time to share your expectations with the site facilitators and use them to meet your needs and the needs of the students. Involve them daily in the class activities and expect them (tell them) to take an active part in your class. They should be expected to participate in classroom management under your direction.

6.1.17. Pacing your teaching: Teaching in the EDNET classroom takes more time. More time is required to prepare lessons as well as to present them. Extra time should be allowed for non-instructional activities such as welcoming students, ensuring that all sites are receiving both audio and video signals, and checking for lesson materials that students will need during the lesson. Answering questions that have arisen since the previous class will consume time. Involving students in a discussion takes longer because of the various receiving sites and the need to insure that all sites are involved. Providing variety in each lesson will take extra time as you change from print format to video format and back to print again. Your students need to have a sense of belonging to a single class. Your challenge is to make one class out of two or three.

6.1.18. Humor in the classroom:

Another important way to help students feel that they are actively participating in the the class and that you are approachable is to use humor in your teaching style. A friendly smile or clever or humorous story to emphasize a point or clarify a position is always effective.

6.2. Effective teaching research: There is an abundance of information available to the distance learning teacher dealing with the traditional teaching format in electronic learning. Take time to research current periodicals and other literature. Ask your USOE faculty trainer for suggestions on current distance learning training materials. Be sure to note in the appendix the professional organization: *United States Distance Learning Association*. It is the major organization concerned with distance education in the world today!

6.2.1. Teaching Attitudes

- Effective teachers have a *can-do* attitude toward their ability to teach and effectively use materials to help the learner learn.
- Effective teachers view themselves as diagnosticians and problem solvers.
- Effective teachers take time to self-evaluate and monitor their instruction.

6.2.2. Teaching Strategies

- Effective teachers have a repertoire of teaching approaches and know when each is appropriate for use.
- Effective teachers set high standards and expect students to achieve them.
- Effective teachers spend class time reviewing previously taught concepts and reteaching when necessary.
- Effective teachers create learning situations where their students move beyond learning facts to organizing information in new ways and formulating concepts for themselves.
- Effective teachers use time wisely ensuring that students spend maximum time in the curriculum area.
- Effective teachers pace instruction at a speed that is appropriate for the content and the students. They use variety in pacing their learning activities.
- Effective teachers make the instructional objectives clear to the students.
- Effective teachers begin classes with a quick roll call, businesslike tone of voice, an opening statement that identifies the behavioral and academic expectations for the students, an anticipation of areas of confusion, and a call for questions.
- Effective teachers check for understanding by asking many questions and receiving responses from many students.
- Effective teachers provide feedback to students constantly on their oral responses.
- Effective teachers give clear, easily understood directions/instructions.
- Effective teachers provide for uninterrupted successful practice.
- Effective teachers provide closure at the end of each class by reviewing the important concepts covered during the class.
- Effective teachers hold review sessions weekly and monthly.

6.2.3. Assignments and Homework:

Effective teachers establish and enforce an accountability system for homework.

Effective teachers use homework results diagnostically to identify the type and extent of misunderstandings.

Effective teachers create assignments that are appropriate for the content and the students.

Effective teachers start off each class by reviewing assignments/homework and by reviewing material covered in the previous few classes.

Effective teachers provide individualized, specific written comments on students' homework.

6.2.4. Working With Student Feedback:

- Effective teachers take into account students previous knowledge and build on it in their teaching.
- Effective teachers establish classroom rules that allow students to attend to personal and procedural needs without having to check with the teacher.
- Effective teachers maintain direct engagement by the student on the academic task.
- Effective teachers encourage the organization of study groups. Cooperation, not competition, should be the goal.

- Effective teachers encourage students to ask questions.
- Effective teachers get to know students personally and on an individual basis.
- Effective teachers use interactivity to practice what is being taught.
- Effective teachers understand that practice and feedback are requirements for active learning.
- Effective teachers elicit feedback on a regular basis.

6.3. Assessing and monitoring student progress: Alternative methods of assessing student performance are receiving increased attention in the education community. The traditional paper and pencil forms of testing and evaluation are being supplemented with additional methods for determining the students' ability to actually perform using their new learning.

These methods may be more difficult over the distance learning system, but there are some alternative ways to effectively evaluating student understanding. In addition to assessing student learning, testing also provide direction to the instructional process. To effectively use these tools in the instructional process requires that teachers test often and use multiple approaches.

An important part of any type of assessment is the development of a method identifying the items to be evaluated and what will be looked for under each item. This needs to be developed prior to the assessment and shared with students so they know what they should cover in their learning. For example, if the student will be assessed on how well they present a piece of poetry, they need to know that the teacher is looking for appropriate voice inflection, clarity of speech, and conveyed understanding of the meaning of the selection. Students then can ensure that these elements are included in their presentation.

6.3.1. Assess a product produced as an outcome of independent work: When students are involved in hands-on learning or are creating a product as part of their learning, it makes sense to use an assessment of the actual product produced. An example of this would be when the students are engaged in writing.

It would make much more sense to look at their actual writing to determine their skills, rather than giving them a test on punctuation. Several states have begun using a product assessment approach to their end-of-year tests. Rather than having students fill in bubble sheets, students are actually writing in a prescribed manner. The results then provide an assessment of the students' skills in writing.

6.3.2. Assess observations of students at work: (May require assistance from site facilitator.) An indicator of how well students are learning can be obtained by how well they are able to work on an assignment or activity.

When class time is provided for students to work, a trained site facilitator can provide information regarding how well students are able to work on their tasks. This can be an indicator of the students' understanding of the content.

6.3.3. Assess student performance or demonstration: Many content areas are more suitable to performance assessment than others. For example, if you want to know how well a student speaks, have him speak. Ensure that your method identifies what you are assessing and share this with the students.

If you are assessing writing skills, you will need to have appropriate prompts developed. Performance assessments take longer, but they provide information about what the student *can* do rather than what the student *tells* you they can do.

6.3.4. Conduct a rapid-fire oral quiz on past learning: An effective strategy for an assessment of the general understanding of the entire class or specific receiving sites can be conducted by asking many short, specific questions relating to the content. It becomes obvious that students don't understand, when you ask a question and are confronted with large blocks of silence.

You can develop systems for having more than a single student respond to each question to help you hear from as many students as possible in a short period of time. This type of assessment also becomes a review of past learned concepts.

6.3.5. Organize groups of students for multiple student activities: Cooperative learning groups can complete a project at each site, and the results can be reported. If the groups have been trained, each student will have a specific role to perform in the process. By assessing the results, it can be determined if all students understood and were able to apply the concepts being measured.

Developing student projects for students presents a real challenge to the distance learning teacher and may be one of the areas where you will want to request extra training. Other EDNET teachers can share with you what techniques they are using and this may provide you with suggestions you can adapt to your specific situation.

Notes: